

# INTERNATIONAL SEARCH REPORT

Inter

Application No

PC1/US2004/031609

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 A61B5/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 115 137 A (ANDERSSON-ENGELS ET AL) 19 May 1992 (1992-05-19)	1,2, 4-10, 12-20, 22-25, 31, 60-63, 66,67, 116,117, 119,120, 123
Y	abstract; claims 1,6; figures 12-15 column 1, line 42 - column 2, line 25 column 3, line 19 - column 6, line 30  ----- -/--	3,11, 121,122

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the International filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the International filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

20 May 2005

Date of mailing of the international search report

02.09.2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Beck, E

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6 142 629 A (ADEL ET AL) 7 November 2000 (2000-11-07) abstract; figure 11 column 8, line 6 - line 21 column 9, line 32 - line 52 -----	3,121, 122
Y	WO 01/11343 A (CAMBRIDGE RESEARCH & INSTRUMENTATION INC) 15 February 2001 (2001-02-15) page 9, line 4 - line 16 page 12, line 4 - line 11 -----	11
A		121

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inal application No.  
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## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
1-20, 22-25, 31, 60-63, 66-67, 116, 117, 119-123

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-20,22-25,31,60-63,66-67,116,117,119-123

A method comprising providing spectrally resolved information comprising information about a set of images in which the light used to illuminate the sample is spectrally filtered, wherein the spectral filtering for each image corresponds to a different spectral weighting function.  
Apparatus adapted to carry out steps of this method.

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2. claims: 68-115,26-30,64-65,118

A method comprising decomposing the spectrally resolved information for each of at least some of the different spatial locations into a contribution from a spectral estimate of a pure spectrum for at least a first one of the components in the sample.  
Apparatus adapted to carry out steps of this method.

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3. claims: 124-166,21

Methods comprising processing the images of the spectrally filtered radiation to construct an image in which signal from the additional components is reduced relative to signal from the target compound.  
Apparatuses adapted to carry out steps of these methods.

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4. claims: 32-33

A method comprising decomposing the spectrally resolved information, wherein the decomposition is a linear decomposition.

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5. claims: 34-59

A method wherein at least one of the spectral estimates is provided independently of or determined from spectrally resolved information. Methods of this determination.

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# INTERNATIONAL SEARCH REPORT

nation on patent family members

Intern Application No  
PCT/US2004/031609

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